

REMARKS

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

Claims 1-24 are pending in this application. Claims 1 and 12 are the independent claims.

Applicant notes with appreciation the Examiner's acknowledgement that certified copies of all priority documents have been received by the U.S.P.T.O.

Applicant also appreciates the Examiner's indication that the Information Disclosure Statement filed on June 20, 2005, has been considered.

Applicant also respectfully notes the present action indicates that the drawings have been accepted by the Examiner.

Objections to the Specification

The specification is objected to for the lack of section headings in accordance with 37 CFR 1.77(b). Applicant has included section headings as suggested by the Examiner. Withdrawal of the objection is respectfully requested.

Claim Rejections - 35 U.S.C. § 103

Claims 1, 2, 4-13, 15 and 18-24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,601,886 ("Ishikawa") in view of U.S. Patent No. 6,338,885 ("Prevost"). Applicant respectfully traverses this rejection for the reasons discussed below.

In order establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), the U.S. Supreme Court in *KSR Int'l Co. v. Teleflex, Inc.*¹ noted that the rejection must establish a reasoning that it would have been obvious for one of ordinary skill in the art to have combined the teachings of the cited document(s). One way to establish this would be to show "some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness" and "identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does."² In addition, the cited document(s), when combined or modified, must teach or suggest all of the claim limitations of the rejected claims.³

Applicant respectfully submits that the proposed combination of references does not meet these criteria. In particular, the rejection fails to demonstrate that one of ordinary skill in the art would have combined the teachings of the Ishikawa and the Prevost references in the manner used to reject the claims, and the applied references fail to teach and suggest *all* of the claim elements.

For example, in the outstanding Office Action, the rejection is based on an assertion that:

it would have been obvious to one skill in the art to employ a tuft gauge and stitch density in the range recited by applicant, since it has been held where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.⁴

Applicant respectfully submits, however, that the above statement is merely conclusory and is not an "explicit rational" as required by *KSR Int'l*. Therefore,

¹ 550 U.S. at ___, 82 USPQ2d at 1396 (2007).

² *Id.*

³ *In re Vaeck*, 947, F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

⁴ See Office Action, mailed August 20, 2008, page 3, first full paragraph.

because the Examiner has not provided an explicit analysis as required by *KSR Int'l*, a *prima facie* case of obviousness has not been established.

In addition, one of ordinary skill in the art would not have combined the teachings of Prevost and the teachings of Ishikawa to arrive at the claimed invention. For instance, as discussed in the instant specification on page 1, line 15 to page 2, line 6, for example, the claimed invention is aimed at overcoming some drawbacks of prior art artificial turf mats, e.g., the distance between two rows is often considerably larger than the distance between the artificial grass blades in a single row, so that the artificial turf field in which such a mat is used will have different properties in different directions. Accordingly, one solution to this problem as defined in independent claims 1 and 12 is to place the artificial grass blades in a row at a mutual distance which may be substantially equal to the distance between adjacent rows. Moreover, the distance may amount to at least 10 mm, for example, in order to prevent a tight packing of the blades in a row, which would result in the filling material being held fast too firmly, leading to local compaction and hardening of the field.

Therefore, contrary to the Examiner's position, the essence of the claimed invention is not just a selection of a range of tuft gauges (distance between the rows) and a range of stitch densities (distance between the pile blades), as suggested by the Examiner; but rather, the realization that the distance between the blades in a row may be substantially equal to the distance between the rows. In other words, the claimed invention involves the selection of one of the relevant distances as a function of the other distance. This results in a substantially even distribution of the grass blades over the artificial turf mat, which in turn leads to a turf having substantially uniform properties in all directions.

Even if *arguendo*, the teachings of the Ishikawa and Prevost references were to be combined, they would nonetheless fail to teach each and every element of the rejected claims. In particular, Applicant respectfully submits that the Ishikawa and Prevost references fail to teach or suggest, *inter alia*, “a mutual distance between successive blades in a row being substantially equal to the distance between adjacent rows and amounting to at least 10 mm,” as recited in claims 1 and 12.

Ishikawa merely discloses an artificial turf which includes tufts of artificial grass filaments and tufts of relatively shorter assist filaments which are planted between the tufts of artificial grass filaments. As implicitly acknowledged by the Examiner, the Ishikawa reference does not include any indication of the spacing of the tufts within a row or the spacing between the rows of tufts. Consequently, Ishikawa does not include any suggestion which might have led the skilled person in the direction of the claimed concept of setting the distance between the blades in a row equal to the mutual spacing of the rows to obtain a uniform distribution of artificial grass blades in the turf mat.

Nor could the skilled person have turned to the Prévost reference for any motivation in this respect, since the Prévost reference is exclusively involved with the spacing between adjacent rows, and does not address the spacing between the various grass blades in a single row. In fact, the clear teaching of the Prévost reference is that **the rows should be spaced as widely as possible**, considering the intended use of the artificial turf, as explained e.g., in col. 2, lines 58-61. According to the Prévost reference, the spacing between the rows of ribbons depends mainly on the footwear of the players using the artificial turf. In col. 6, lines 15-28, it is explained that the cleats worn on shoes of athletes for different sports have a spacing on the average of about $\frac{3}{4}$ inch, which would then apparently also define the spacing between the rows.

For horse racing, on the other hand, a spacing between the rows of up to $2\frac{1}{4}$ inches would be necessary to accommodate the wider hooves of the horses.

Therefore, as indicated above, the claimed range of spacings between adjacent rows in the Prévost reference runs from $\frac{5}{8}$ inch to $2\frac{1}{4}$ inches (16-57 mm), while the text in col. 8, lines 13-16 even mentions a maximum of $2\frac{1}{2}$ inches apart. The claimed invention, on the other hand, constitutes a marked departure from conventional artificial turfs, where the blades in a row are generally always much more tightly spaced than the rows themselves. That is, the Prévost reference is illustrative of a conventional tuft, which mentions a spacing of blades within a row between $\frac{1}{8}$ and $\frac{1}{2}$ inch (2 to 8 tufts per inch) in combination with a row spacing between $\frac{5}{8}$ and $2\frac{1}{4}$ inch (or even $2\frac{1}{2}$ inch). See col. 8, lines 13-16. Accordingly, the Prévost reference discloses that the range of row spacings is approximately five times as large as the range of blade spacings within a row.

In fact, the distance between adjacent artificial grass blades in a single row is not explicitly mentioned by Prévost, but instead, in col. 6, lines 7 and 8, it is mentioned that between 2 and 8 tufts are formed per inch of row, with 4 tufts per inch being preferable. In other words, the distance between two tufts is $\frac{1}{8}$ inch to $\frac{1}{2}$ inch (3.2 to 14 mm), while the preferred distance is $\frac{1}{4}$ inch (6.4 mm). From these values, it is immediately clear that Prévost does not teach an artificial turf in which the distance between successive blades in a row is substantially equal to the distance between adjacent rows.

Even if the largest spacing of blades within a row of $\frac{1}{2}$ inch can be combined with the smallest spacing between two rows of $\frac{5}{8}$ inch, the spacing between the rows would still be 25% greater than the spacing between the blades. When the preferred spacing of the blades within a row of $\frac{1}{4}$ inch is applied, the spacing between two rows, which may vary between $\frac{5}{8}$ and $2\frac{1}{4}$ inch, is $2\frac{1}{2}$ to 9 times as large as the spacing

between the blades in the row. Consequently, the Prévost reference does not disclose, or even suggest the claimed invention of claims 1 and 12.

Moreover, there is no suggestion in either the Ishikawa or the Prévost references of the importance of providing an artificial turf with constant properties which are the same in all directions. Since the prior art does not even consider the problem underlying the claimed invention, one skilled in the art would not have combined the the Ishikawa or the Prévost references to arrive at the claimed invention.

Since the rejection fails to provide a proper motivation to combine the Ishikawa and the Prévost references, and since the proposed combination of references would, even if combined, fail to disclose or suggest each and every element of the rejected claims, Applicant respectfully submits that no *prima facie* case of obviousness has been established with respect to claims 1 and 12. Accordingly, Applicant respectfully requests that the rejection of claims 1, 2, 4-13, 15 and 18-24 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Claims 3 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishikawa in view of Prevost as applied to claims 1 and 12 above, and in further view of U.S. Patent No. 6,955,841 ("Weghuis"). Applicant respectfully traverses this rejection for the reasons discussed below.

Claims 3 and 14 are believed to be allowable for at least the reasons set forth above regarding claims 1 and 12. The Weghuis reference fails to provide the teachings noted above as missing from the Ishikawa reference and/or Prevost reference. Since claims 3 and 14 are patentable at least by virtue of their dependency on either independent claims 1 or 12, Applicant respectfully requests that the rejection of claims 3 and 14 under 35 U.S.C. § 103(a) be withdrawn.

CONCLUSION

In view of the above remarks and amendments, Applicants respectfully submit that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. Further, the above remarks demonstrate the failings of the outstanding rejections, and are sufficient to overcome the rejections. However, these remarks are not intended to, nor need they, comprehensively address each and every reason for the patentability of the claimed subject matter over the applied prior art. Accordingly, Applicants do not contend that the claims are patentable solely on the basis of the particular claim elements discussed above.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned, at the telephone number below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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